Evolution of Learning

From traditional Education to MOOCs.

Saad Lotfey

Founder& Science Communicator
@Science Shop

Agenda

1. Learning Vs Education.
2. Traditional Education.
3. Learning Styles.
4. MOOCs.
5. Movies to watch.

Rules

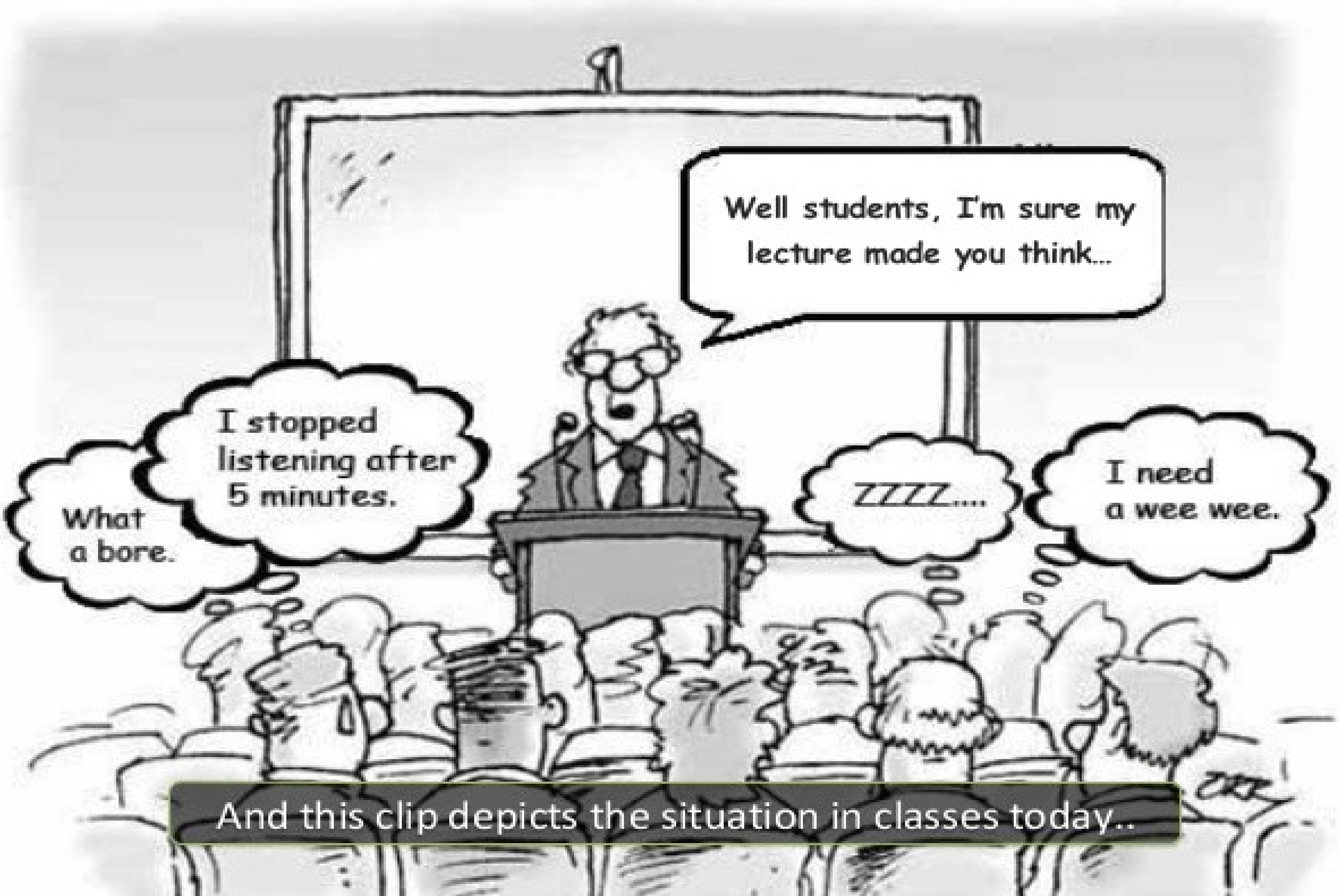


Learning Vs Education

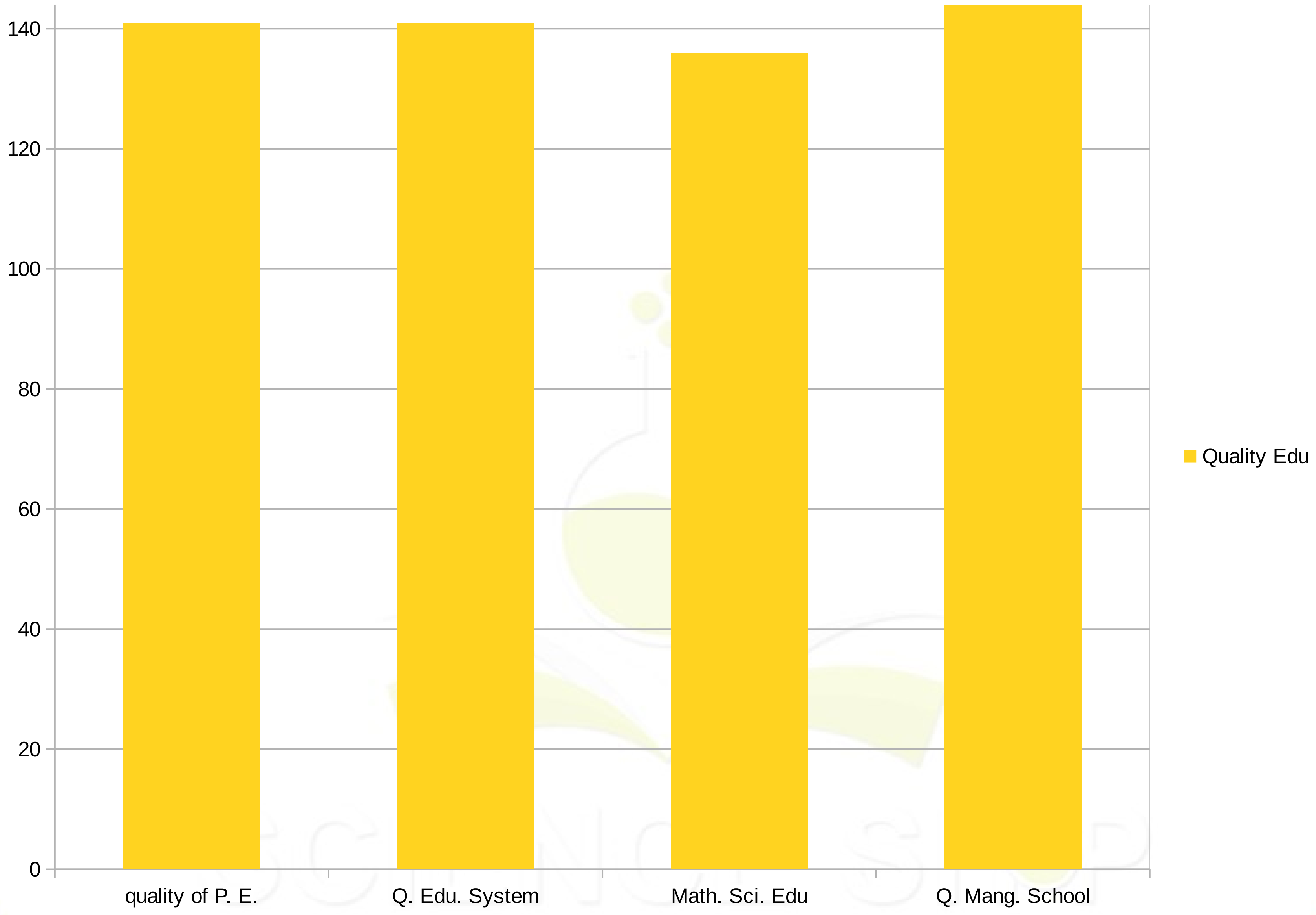


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Traditional Education



Education Statistics.



Learning Styles

VERBAL

Words are your strongpoint! You prefer to use words both in speech and in writing!

VISUAL

You prefer to use pictures, diagrams, images and spatial understanding to help you learn

MUSICAL / AUDITORY

You prefer using sounds or music or even rhythms to help you learn.

PHYSICAL / KINAESTHETIC

You use your hands, body and sense of touch to help you learn. You might 'act things out'.

WHAT'S YOUR LEARNING STYLE?

LOGICAL / MATHEMATICAL

Learning is easier for you if you use logic, reasoning, systems and sequences.

SOCIAL

You like to learn new things as a part of a group. Explaining your understanding to a group helps you to learn.

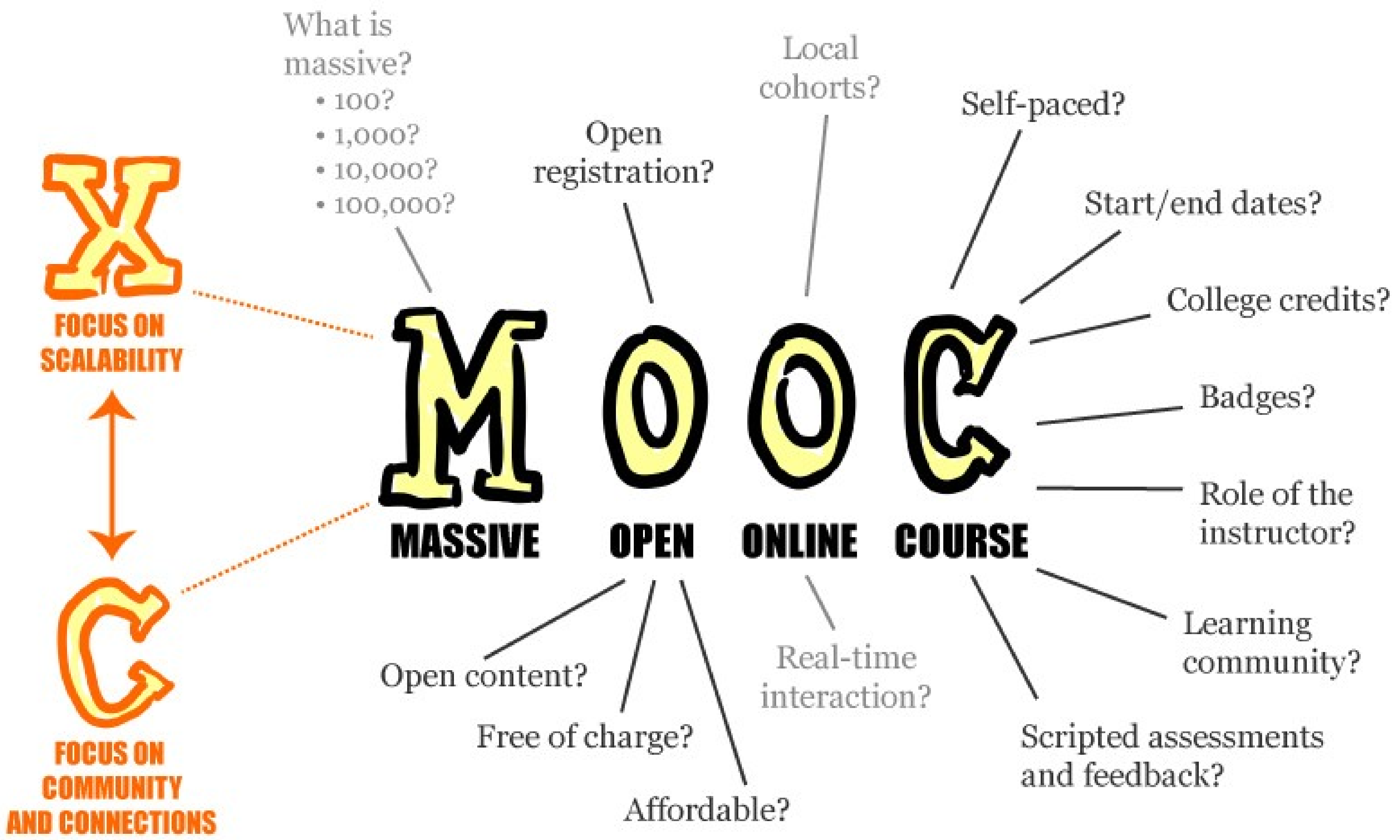
SOLITARY

You like to work alone. You use self-study and prefer your own company when learning.

COMBINATION

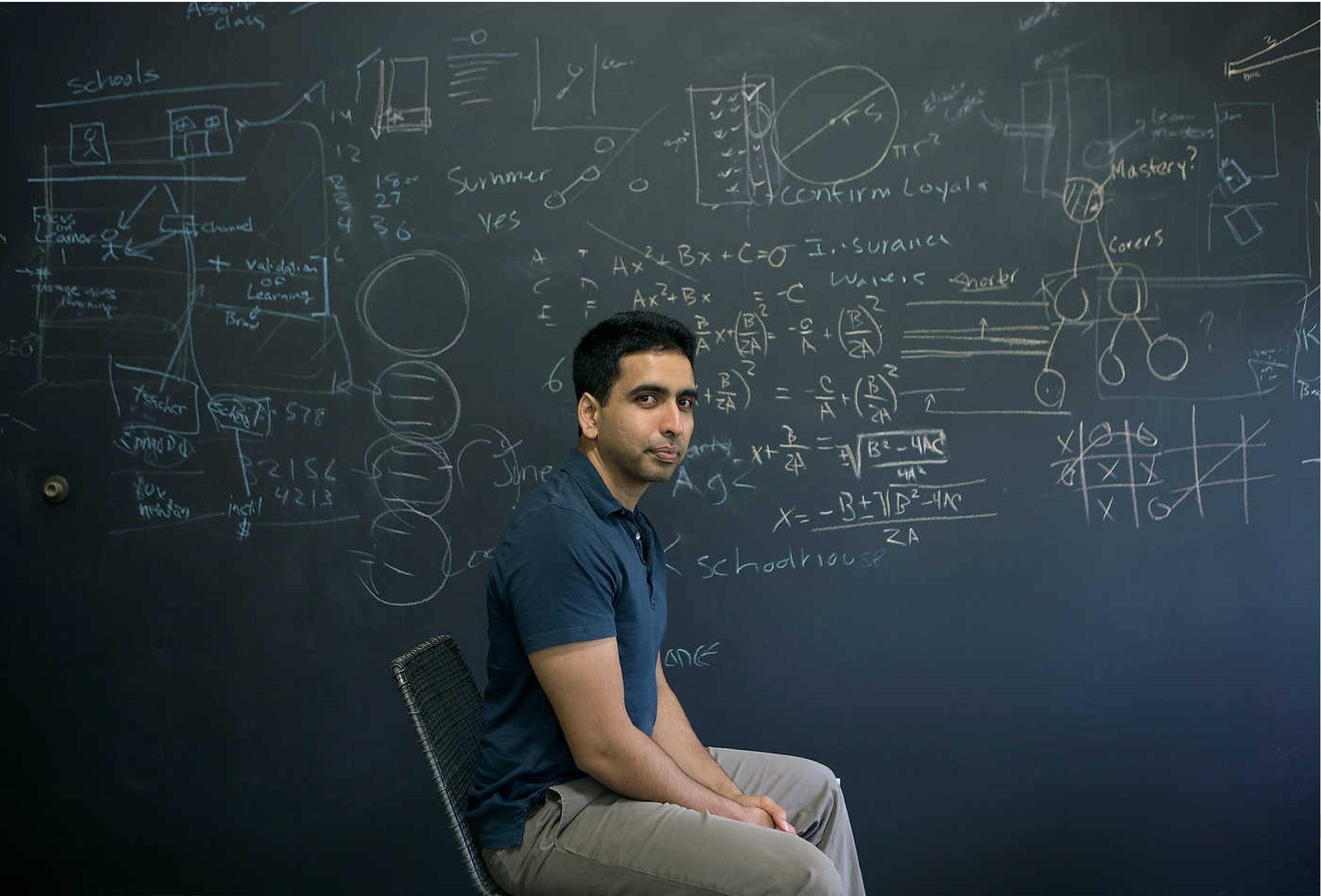
Your learning style is a combination of two or more of these styles.

MOOCs

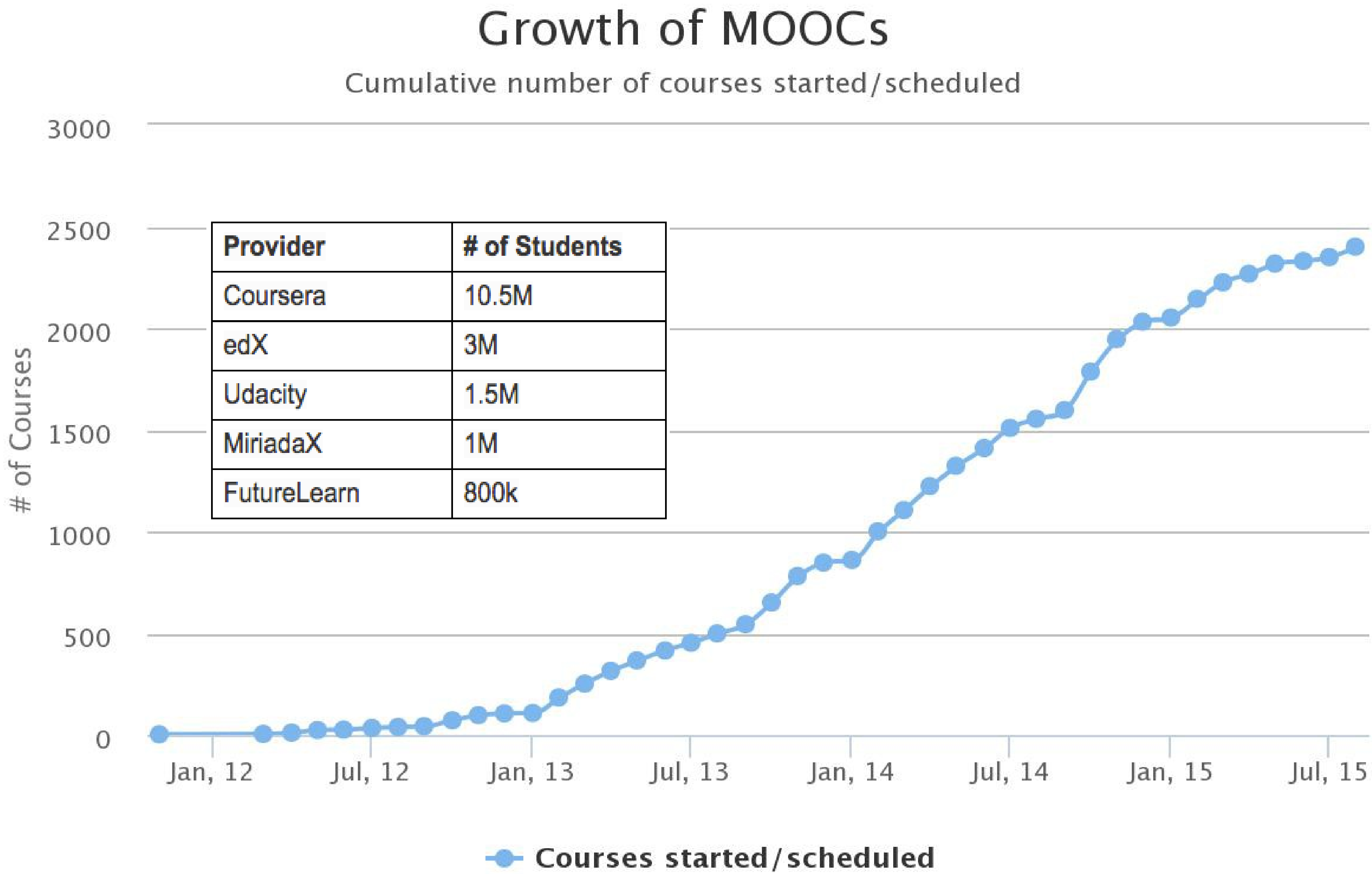


What is massive?
• 100?
• 1,000?
• 10,000?
• 100,000?
Open registration?
Local cohorts?
Self-paced?
Start/end dates?
College credits?
Badges?
Role of the instructor?
Learning community?
Scripted assessments and feedback?
Real-time interaction?
Affordable?
Free of charge?
Open content?
MASSIVE
OPEN
ONLINE
COURSE
FOCUS ON SCALABILITY
FOCUS ON COMMUNITY AND CONNECTIONS

Salman Khan

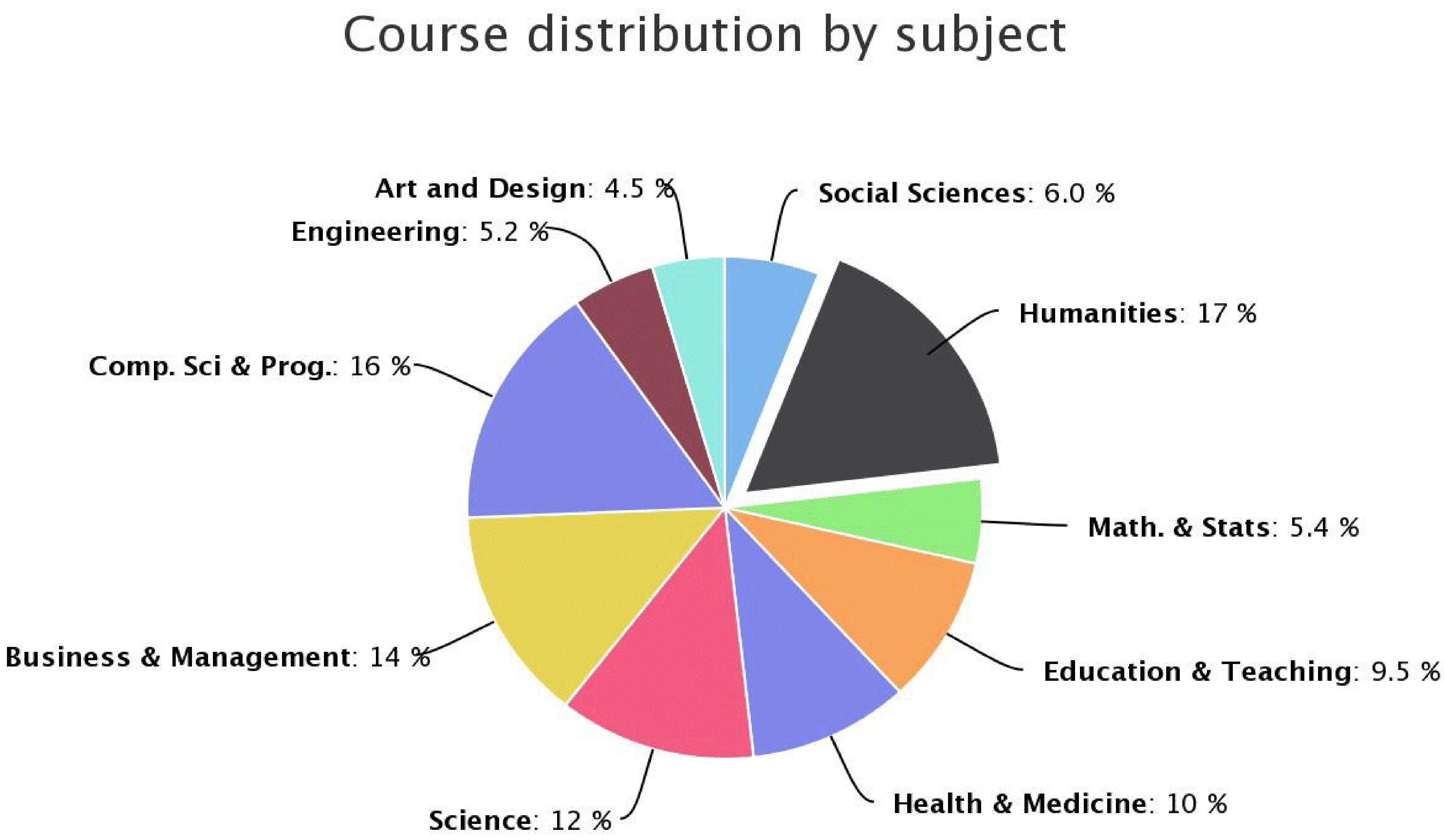

schools
Summer
yes
Mastery?
Validation of Learning
Teacher
schoolhouse

MOOCs Statistics.



Provider	# of Students
Coursera	10.5M
edX	3M
Udacity	1.5M
MiriadaX	1M
FutureLearn	800k

MOOCs Statistics.



Why to MOOC

- **Money:**
  free for audience , low cost for students
- **Time:**
  self paced – due date.
- **New approaches:**
  modern method of thinking, new researches.
- **Competition:**
  over thousands of students in single course.
- **Real interaction:**
  discussion forum – interaction with instructors

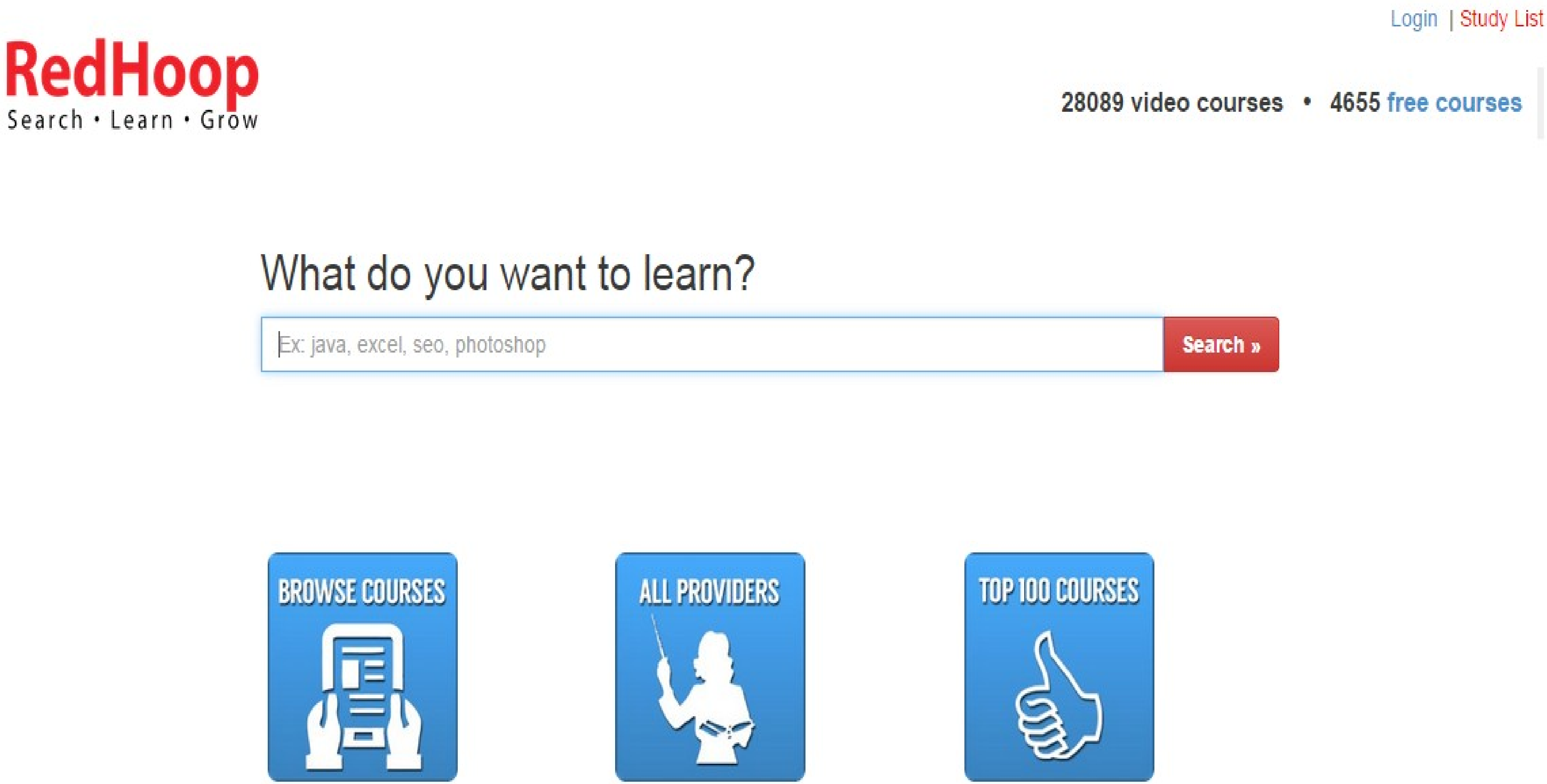
Benefits of MOOCs

- Learning at any field You prefer.
- Knowledge from the source.
- Experience exchange.
- Learning something you would never learn without MOOCs.
- New science. (neuroparasitology –– Quantum biology).

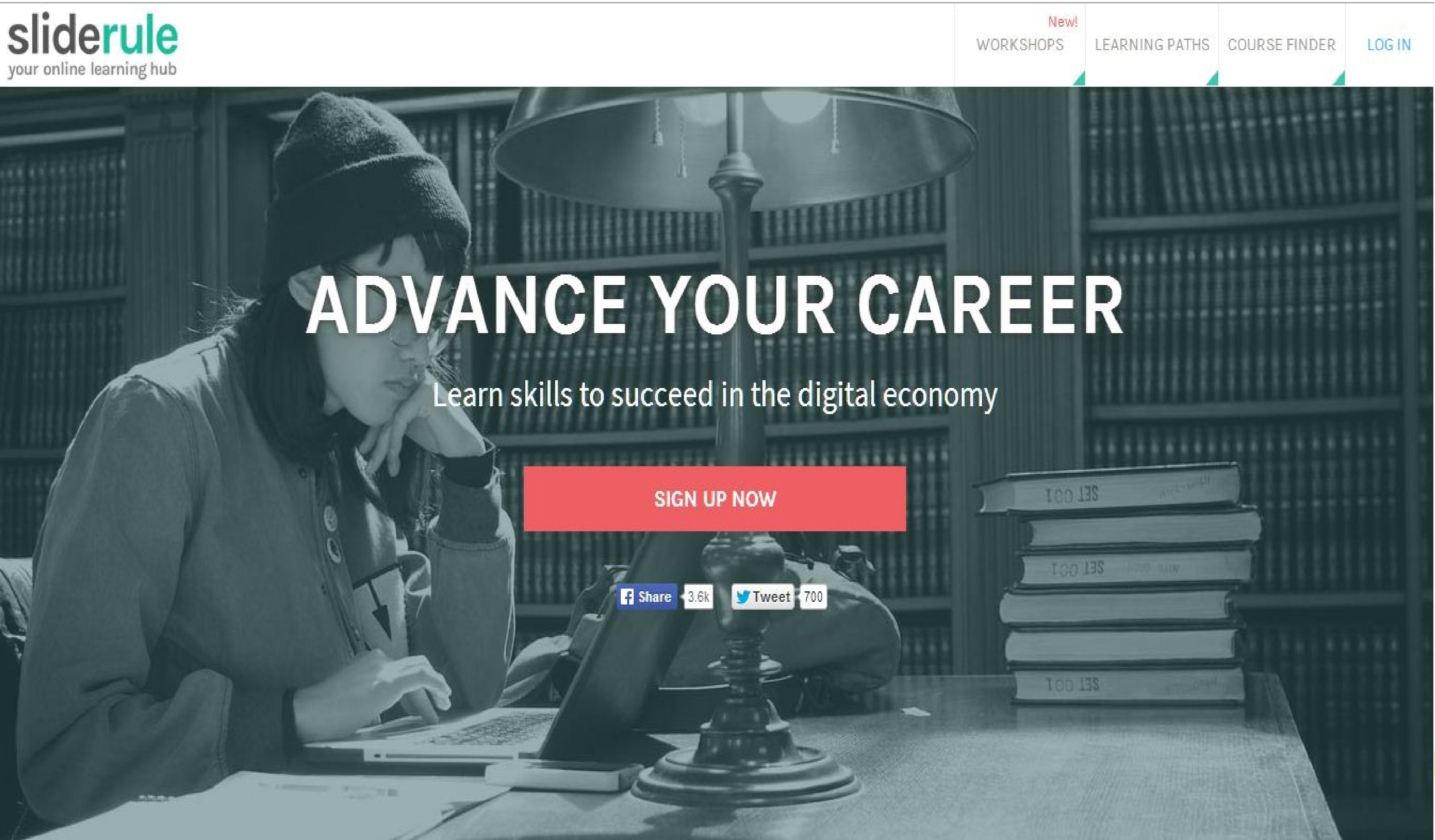
Types of Certificate

- CC = Certificate of Completion
- CA = Certificate of Accomplishment
- HCC – Honor Code Certificate
- VC$ = Verified Certificate
- VCA$ = Verified Certificate of Accomplishment
- SA = Statement of Accomplishment
- SP$ = Statement of Participation
- NI – No Information About Certificate Available
- NC = No Certificate

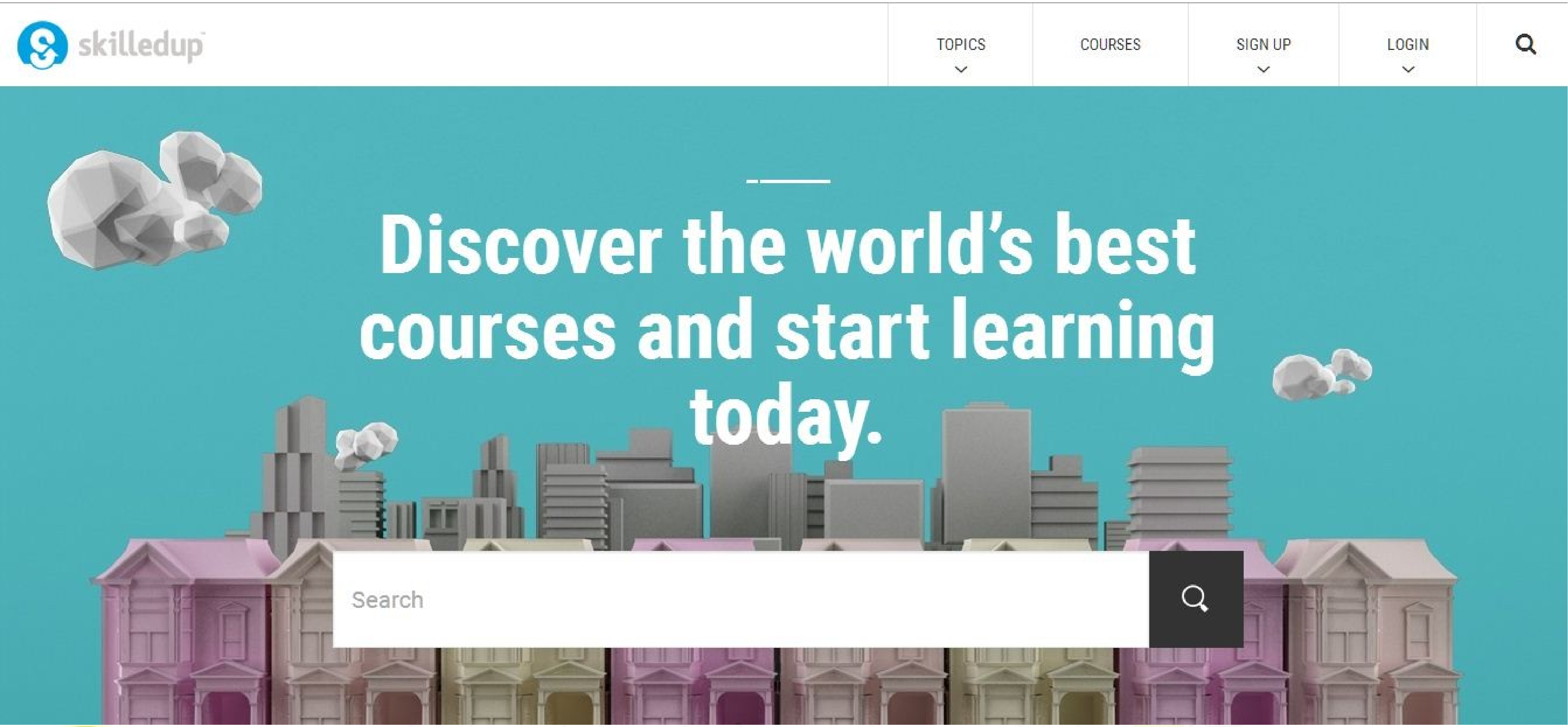
MOOCs Finders.



Sliderule.com

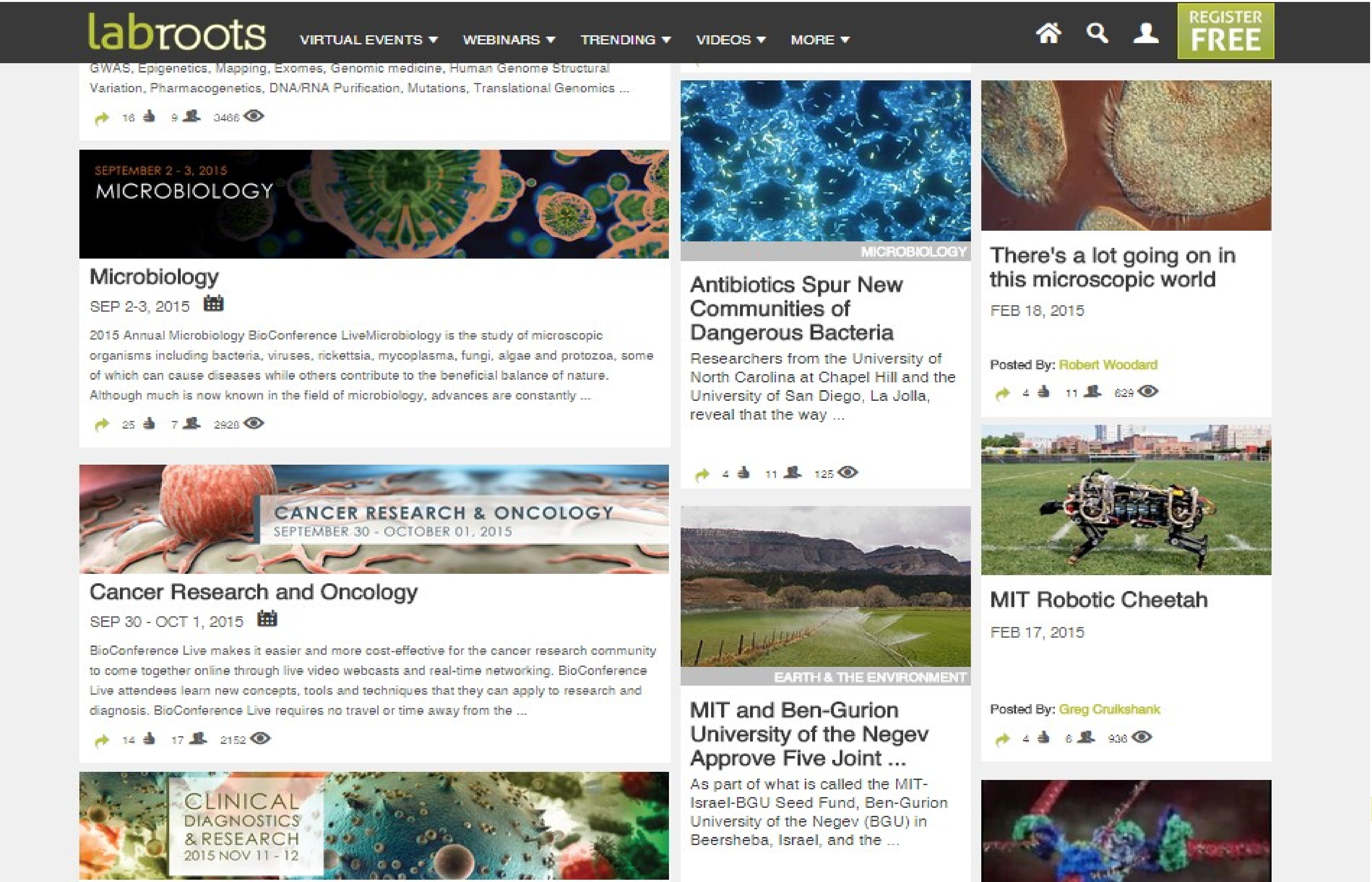


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As part of what is called the MIT-Israel-BGU Seed Fund, Ben-Gurion University of the Negev (BGU) in Beersheba, Israel, and the ...
There's a lot going on in this microscopic world
FEB 18, 2015
Posted By: Robert Woodard
4 11 629
MIT Robotic Cheetah
FEB 17, 2015
Posted By: Greg Cruikshank
4 6 936

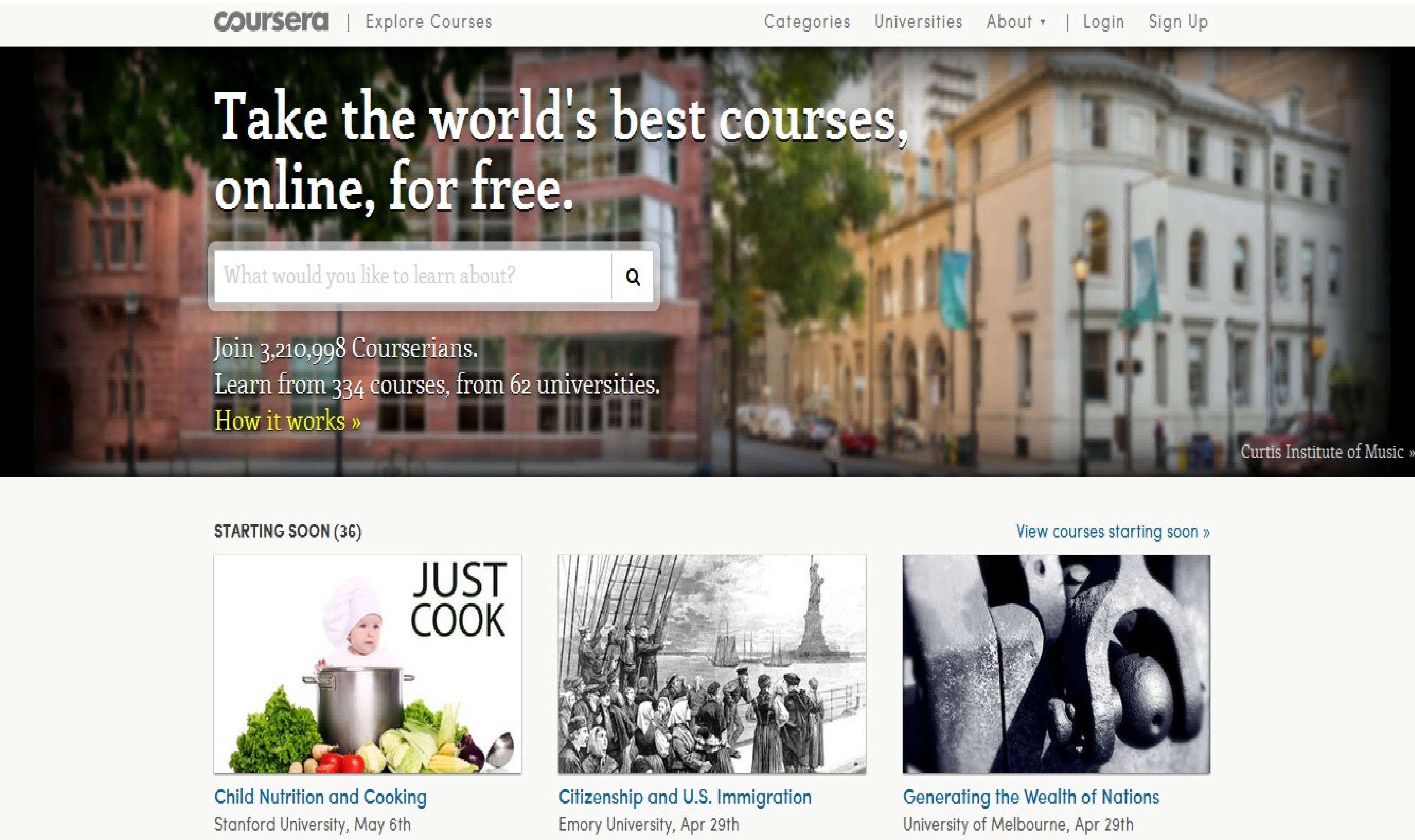
MOOCs Websites - Arabic

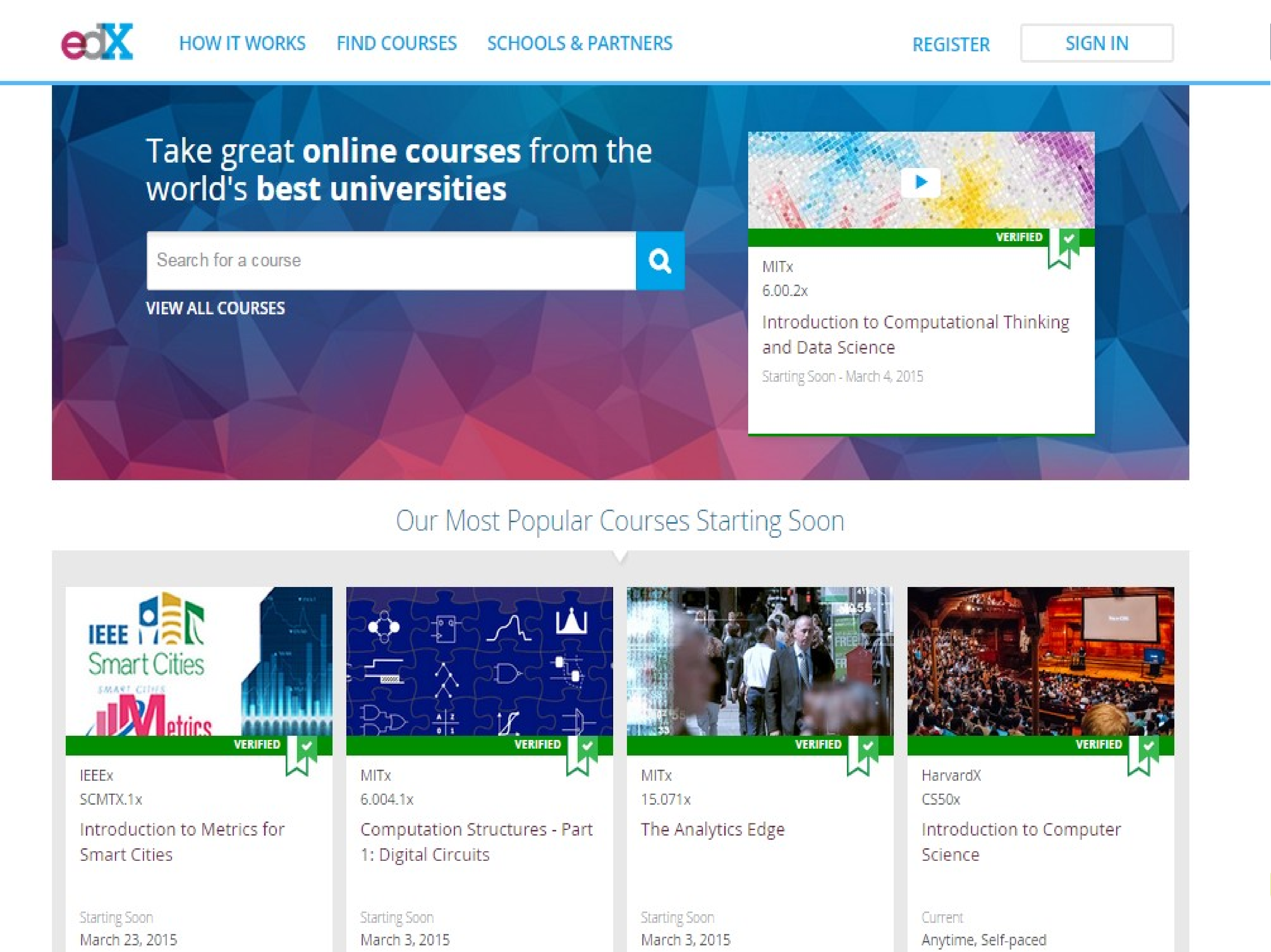


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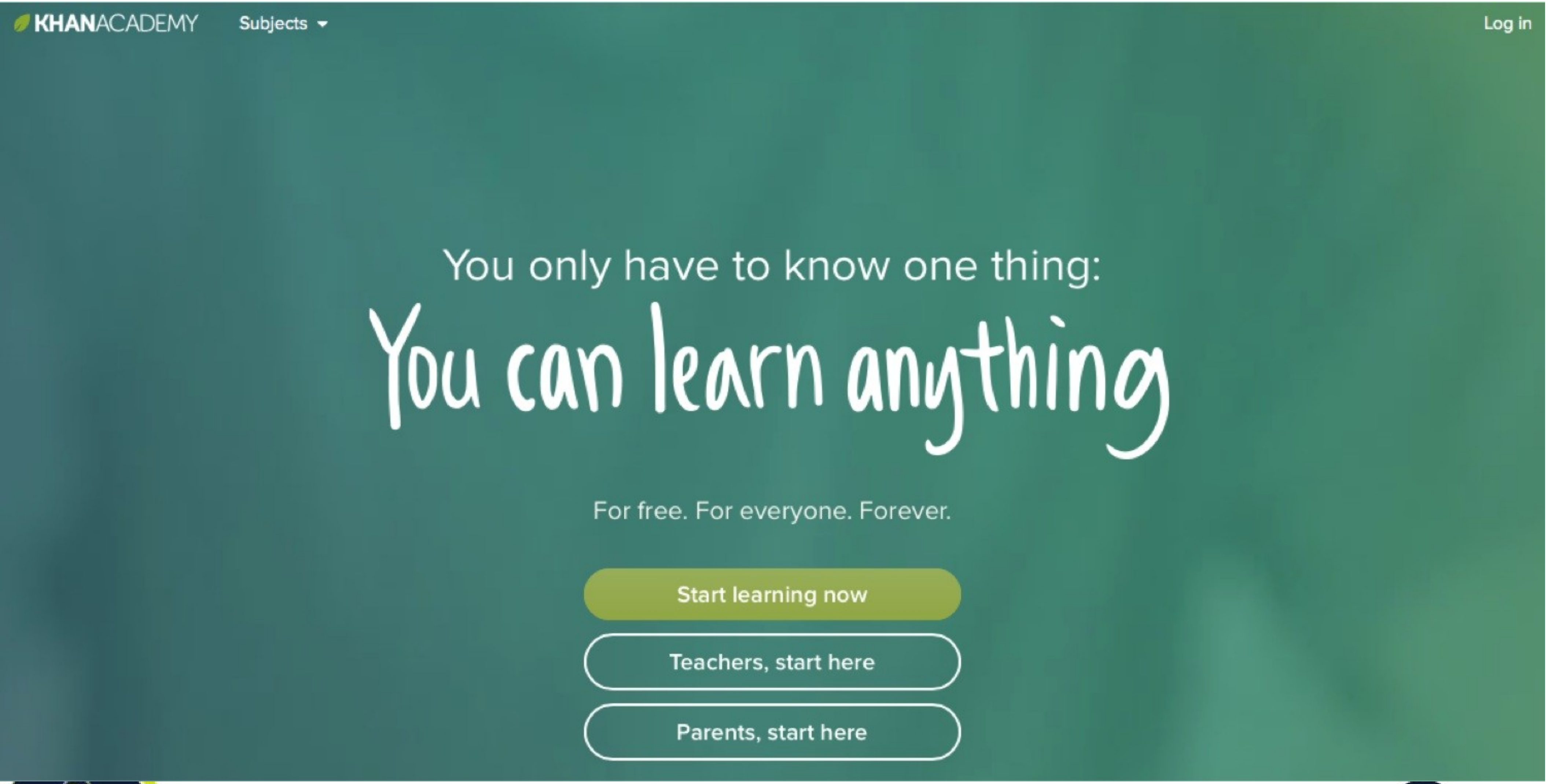

منصة تدريبية عربية لكافة العلوم والمهارات
علِّم وتعلَّم
دخول
اشترك الآن
مهارة

MOOCs Websites - English



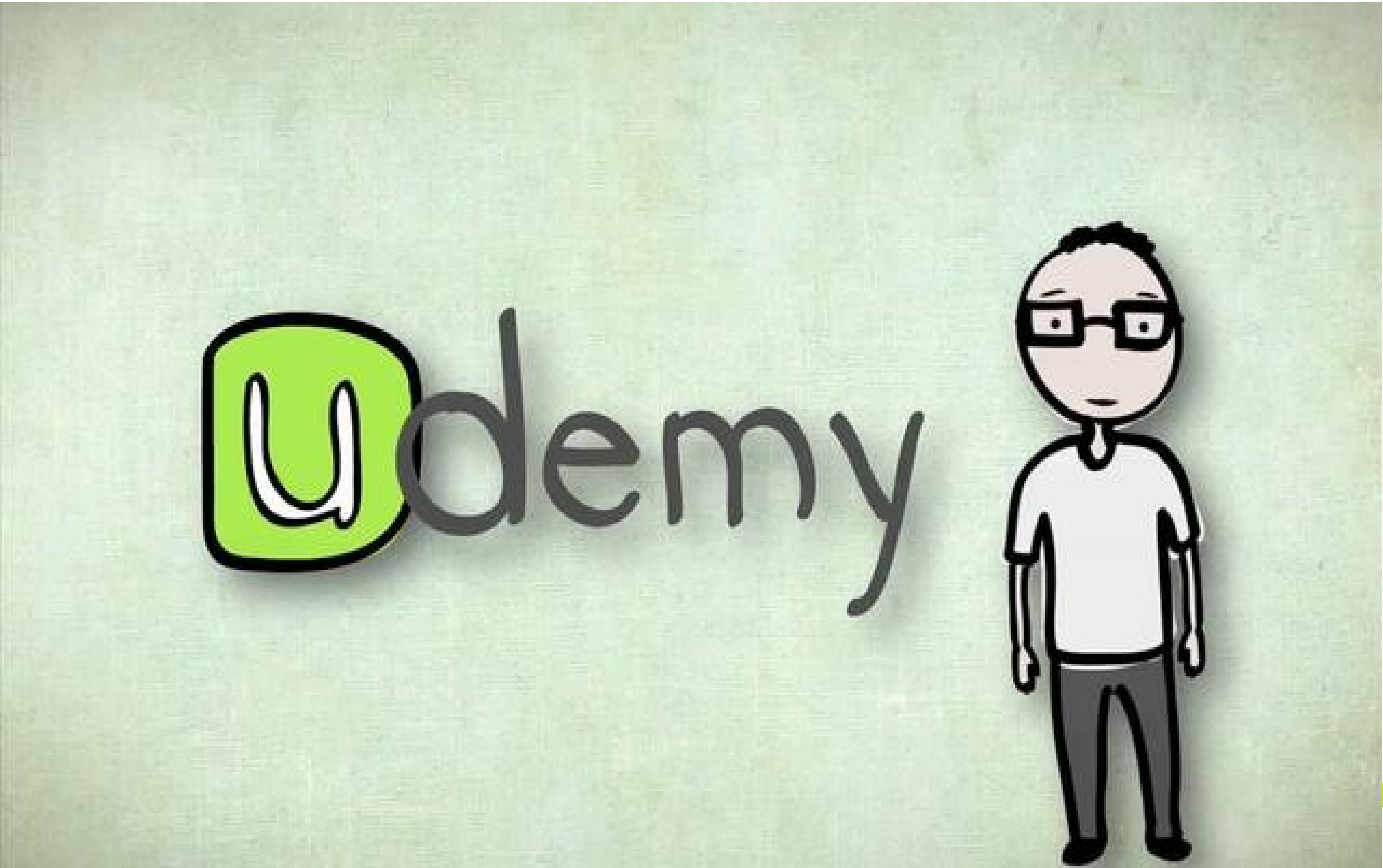

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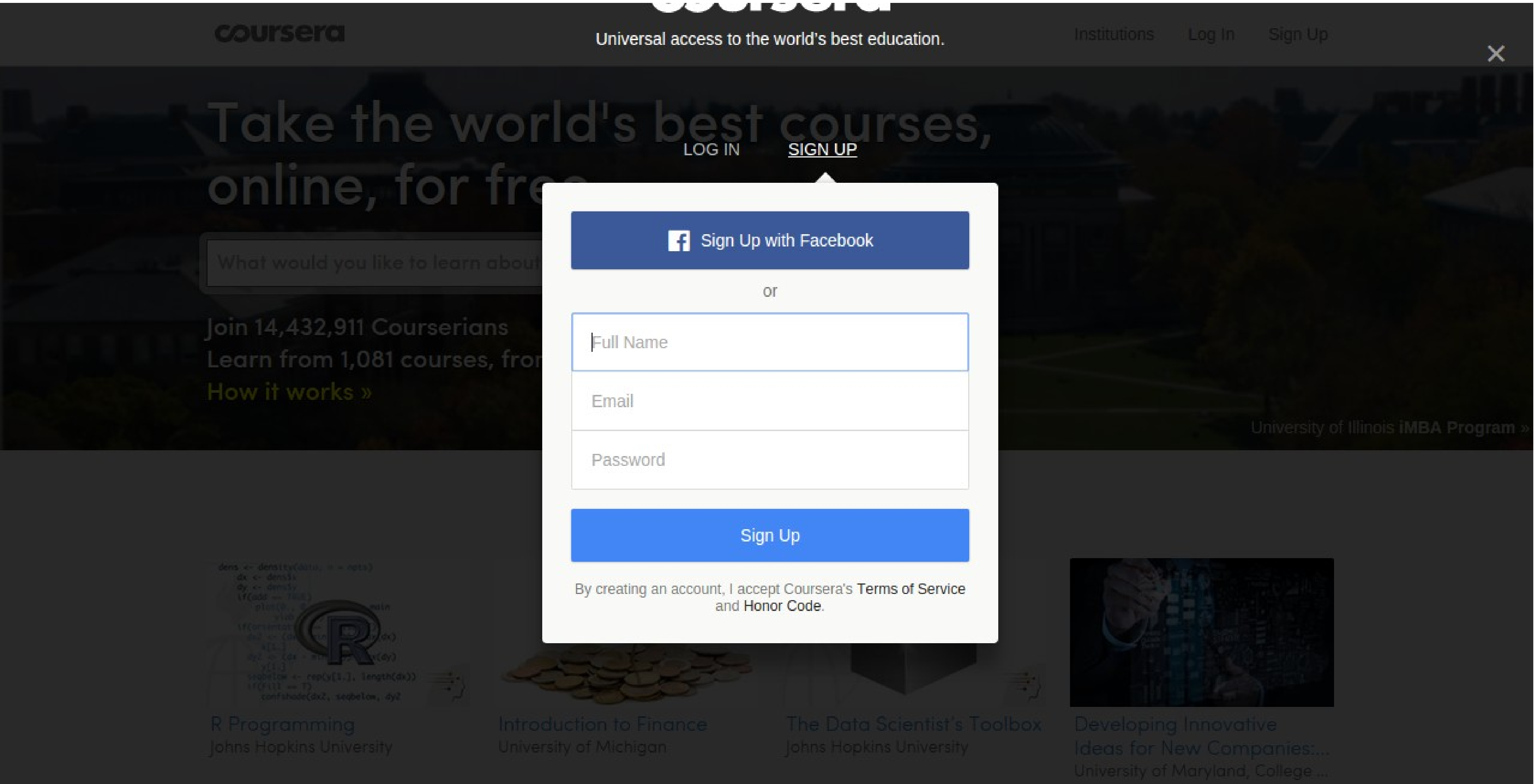


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Udemy



Coursera



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Coursera

coursera   Institutions   Saad Lotfey

Search for a course

On-Demand	209
Eligible For	
Course Certificate	312
Specialization	109
All Categories	
Arts	56
Biology & Life Sciences	136
Business & Management	186
Chemistry	34
Computer Science: Artificial Intelligence	51
Computer Science: Software Engineering	85
Computer Science: Systems & Security	50
Computer Science: Theory	71
Economics & Finance	145
Education	133
Energy & Earth Sciences	48
Engineering	93
Food and Nutrition	32
Health & Society	161
Humanities	201
Information, Tech & Design	143

Courses



Johns Hopkins University
The Data Scientist's Toolbox
with Jeff Leek, PhD, Roger D. Peng, PhD & Brian Caffo, PhD
August 3, 2015
4 weeks long
Specializations



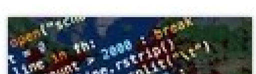
Johns Hopkins University
R Programming
with Roger D. Peng, PhD, Jeff Leek, PhD & Brian Caffo, PhD
August 3, 2015
4 weeks long
Specializations



University of California, San Diego
Learning How to Learn: Powerful mental tools to help you master tough subjects
with Dr. Barbara Oakley & Dr. Terrence Sejnowski
View course
Course Certificate



Stanford University
Machine Learning
with Andrew Ng
View course



University of Michigan
Programming for Everybody (Python)
October 5, 2015
10 weeks long

Coursera

coursera

Institutions | Saad Lotfey

nanotechnology

nanotechnology

- On-Demand 0

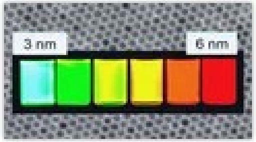
Eligible For

- Course Certificate 0
- Specialization 0

All Categories

- Arts 0
- Biology & Life Sciences 3
- Business & Management 0
- Chemistry 5
- Computer Science: Artificial Intelligence 0
- Computer Science: Software Engineering 0
- Computer Science: Systems & Security 0
- Computer Science: Theory 0
- Economics & Finance 0
- Education 0
- Energy & Earth Sciences 0
- Engineering 4
- Food and Nutrition 0
- Health & Society 1
- Information, Tech & Design 0
- Law 0

Courses



Rice University
Nanotechnology: The Basics
with Professor Vicki Colvin & Daniel Mittleman
There are no open sessions.



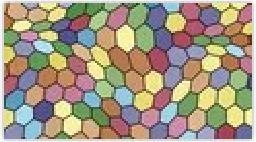
Technion - Israel Institute of Technology
Nanotechnology and Nanosensors
with Prof. Hossam Haick
There are no open sessions.



Technion - Israel Institute of Technology
التقانة والمستشعرات النانوية
with Prof. Hossam Haick
There are no open sessions.



Rice University
Analytical Chemistry / Instrumental Analysis
with Professor Vicki Colvin
There are no open sessions.



University of Manchester
Graphene and 2-dimensional Materials
with Dr Aravind Vijayaraghavan
There are no open sessions.

Coursera

TECHNION
Israel Institute of Technology

التقانة والمستشعرات النانوية

هو مساق للمهتمين في التعرف على أدوات الاستشعار الحديثة التي تستعين بتقانة النانو (وهي التقانة التي تبحث في المجال بين واحد إلى مئة نانوميتر، أي في أجزاء من المليار من المتر) لفرز ومراقبة الأحداث المختلفة في حياتنا الشخصية أو العملية. في أطار المساق، سنكتشف معا عالم النانو المذهل الذي يتعامل مع الوحدات الأساسية في بناء المادة. وبهذا سوف نمهد الطريق لتطبيقات إبداعية لانهائية تطبق في كل جزء من حياتنا اليومية، بدءا من تشخيصات وعلاجات (في الجسم الحي أو خارجه) للأمراض، وثم نستمر في تقانة مراقبة جودة المنتوجات وما يختص بالبيئة، وننهي في تقانة مراقبة القضايا الأمنية. سنتعلم في هذا السعي كيف نصَنع هذه الأدوات الجديدة، وكيف نميزها، وكيف نتحكم بها، وكيف ندمجها في التطبيقات المختلفة.



About the Course

وصف المساق

تقانة ومستشعرات النانو هو مجال يحوي اختصاصات عديدة ومتداخلة التي تضم الكيمياء/البيوكيمياء، الفيزياء، البيولوجيا، علم المواد، هندسة الإلكترونيات وغيرها. سيعرض المساق الحالي بعض مبادئ تقانة ومواد النانو الاساسيّة ودورها الهام في اجهزة و خواص الاستشعار. ستناقش في هذا المساق معلومات شيقة من تخصصات متعددة في مجال العلوم والهندسة في المستوى النانوي، مستهدفا فهم الاختلافات الفيزيائية الأساسية لمستشعرات النانو. حين إنهاء هذا المساق، يكون قد تعلم الطالب تصنيع، تمييز، ومعالجة مواد النانو، ومستشعرات النانو، وكيف من الممكن تسخيرها لبناء تطبيقات

Sessions

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Course at a Glance

- 10 weeks of study
- 3-4 hours/week
- العربية

Coursera

Blended Learning: Personalizing Education for Students

by New Teacher Center

Outline Discussions Verification Settings

NEXT...

Introduction

My progress

These are assessments that you need to complete to pass the course.

Pass Course

Get Recognized for Your Learning

Course Certificates are credentials that showcase the real skills you're learning from New Teacher Center

Show

Coursera

Introduction and Course Overview

23 min

- Module 6 Overview Reading
- Introduction 6 min
- The Process of Innovation I 10 min
- The Process of Innovation II 7 min

Wrapping Up

8 min

- The Final Assignment 4 min
- Closing of the Course 4 min
- Additional Resources Reading

Peer Review

30 min

- Peer Review: Final Assignment Submit your project

Specializations



Financial Aid



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Dear student,

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Note that providing the Verified Certificate incurs significant costs for Coursera. Thus, please request this financial aid package only if you intend to make a serious attempt at completing the class. If we suspect abuse of this program, we may be forced to discontinue it, which would be to the detriment of many deserving students.

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Once your application is approved, we'll email you a receipt for your Verified Certificate (with a payment of $0) and you can start working your way towards earning a Verified Certificate!

Sincerely,

Andrew Ng
Coursera Co-founder

Daphne Koller
Coursera Co-founder

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What is your annual income in USD?

$ Amount .00

Which country are you currently located in?

Egypt

Please describe your financial need and explain the specific circumstances that motivate your request for financial aid. (50-300 words)

Please tell us why you are taking this course. What is your interest in this field? How would a Verified Certificate be valuable to you? (50-300 words)

When participating in this course, how do you intend to demonstrate academic integrity and contribute to the course's community? (50-300 words)

Websites

1 - https://www.edx.org/
2- https://www.coursera.org/
3- http://www.saylor.org/
4- http://web.mit.edu/
5- http://www.udacity.com/
6- http://train.usaco.org/usacogate
7- http://www.codecademy.com/learn
8- http://thenewboston.org/tutorial.php
9- http://www.codeavengers.com/
10- http://ocw.mit.edu/courses/
11- http://www.khanacademy.org/
12- http://www.extension.harvard.edu/courses/course-search
13- http://class.stanford.edu/
14- http://projecteuler.net/

Websites

18- http://www.learnstreet.com/
19- http://www.hackety.com/
20- http://www.teachingtree.co/
21- http://www.code.org/
22- http://www.hackthissite.org/
23- https://brilliant.org
24- http://www.learnerstv.com/
25- http://mruniversity.com/
26- https://www.venture-lab.org/
27- https://education.10gen.com/
28- https://openhpi.de/
29- http://oli.cmu.edu/
30- http://oyc.yale.edu/
31- http://webcast.berkeley.edu/
32- http://openclassroom.stanford.edu/MainFol

Websites

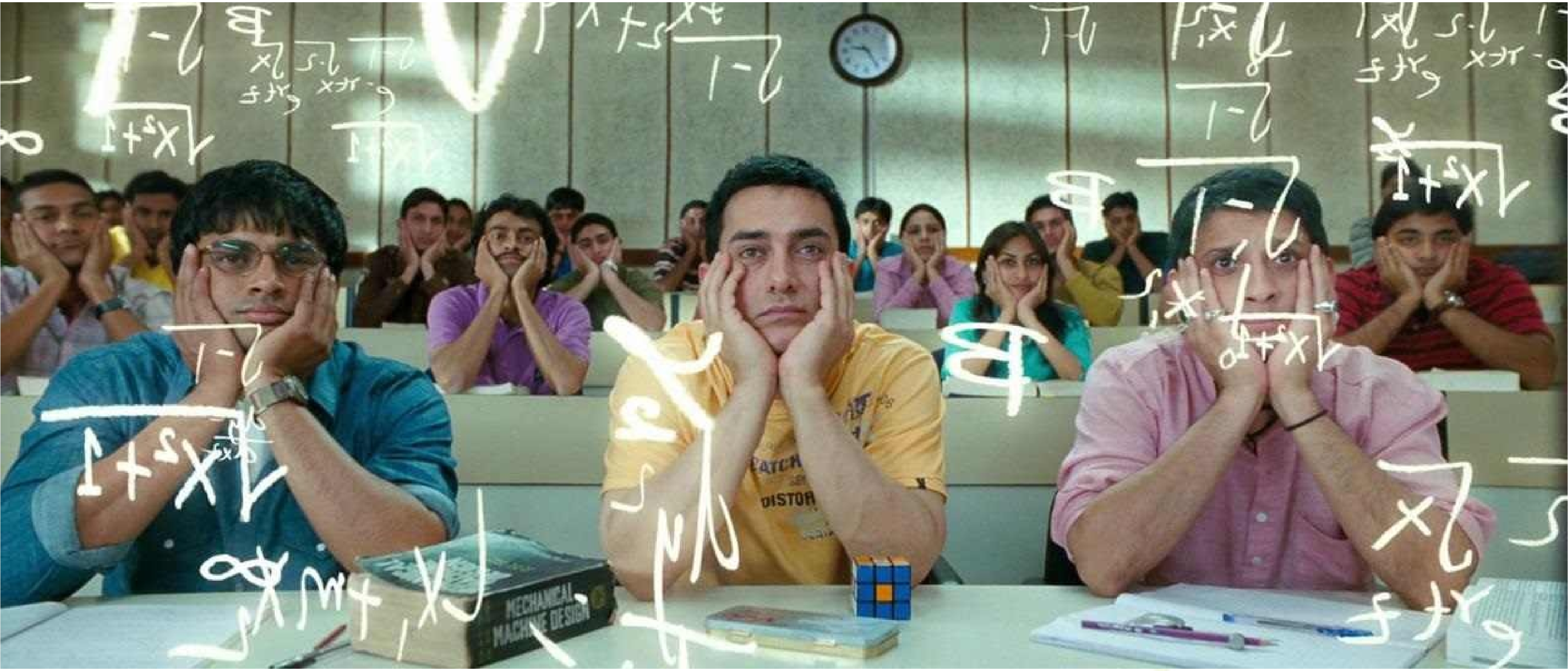
43- http://nptel.iitm.ac.in/
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45- http://www.nalandau.com/
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47- http://www.learntobe.org/
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49- https://www.duolingo.com/
50- https://iversity.org/
51- http://www.myigetit.com/?campaignid=1742&mbsy=hzBq/
52- https://www.verbling.com/
53- http://livemocha.com/
54- http://www.lynda.com/
55- https://www.open2study.com/courses
56- http://www.alison.com/

Movies to Watch



Movies to Watch

3 Idiots



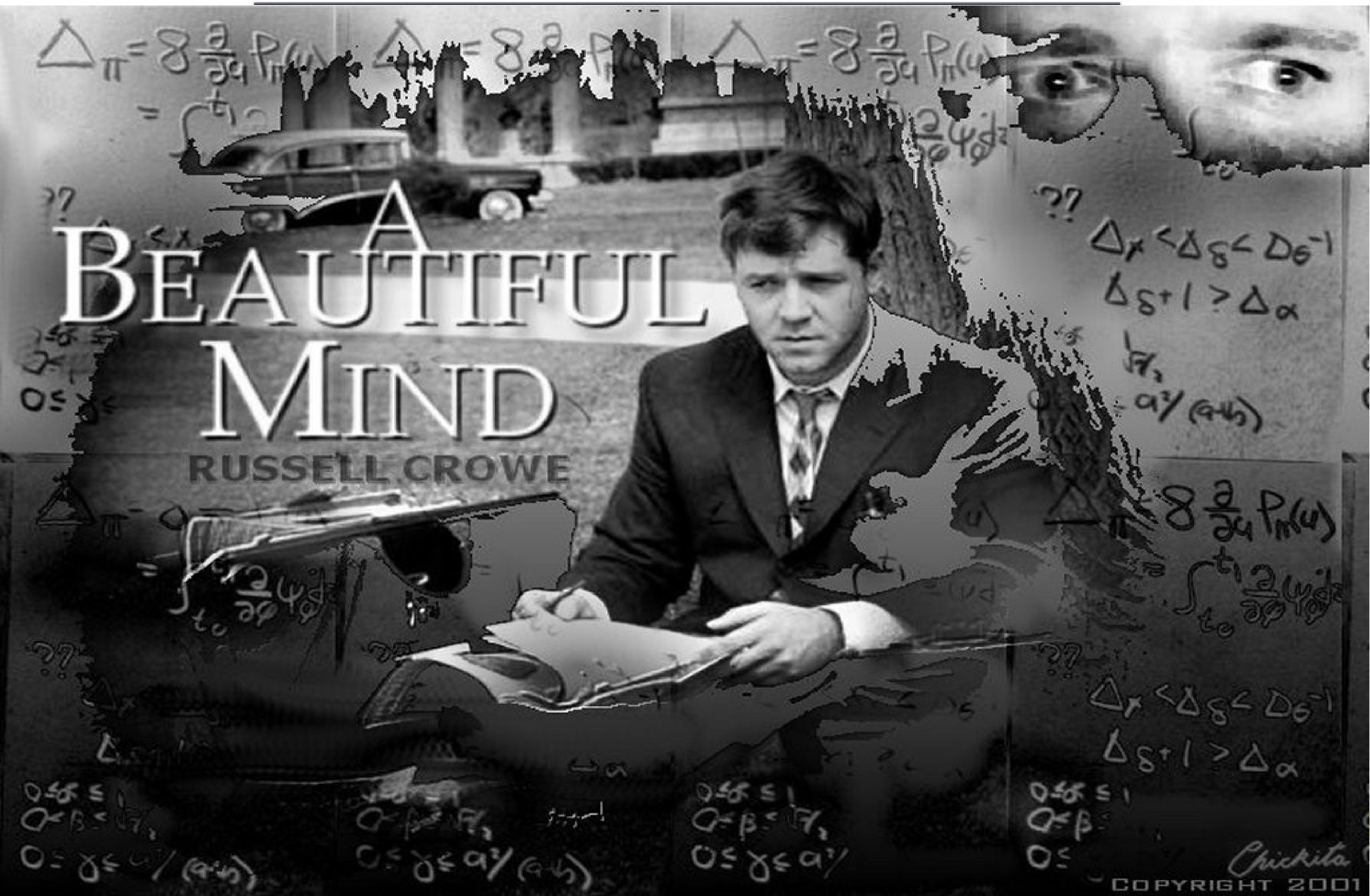
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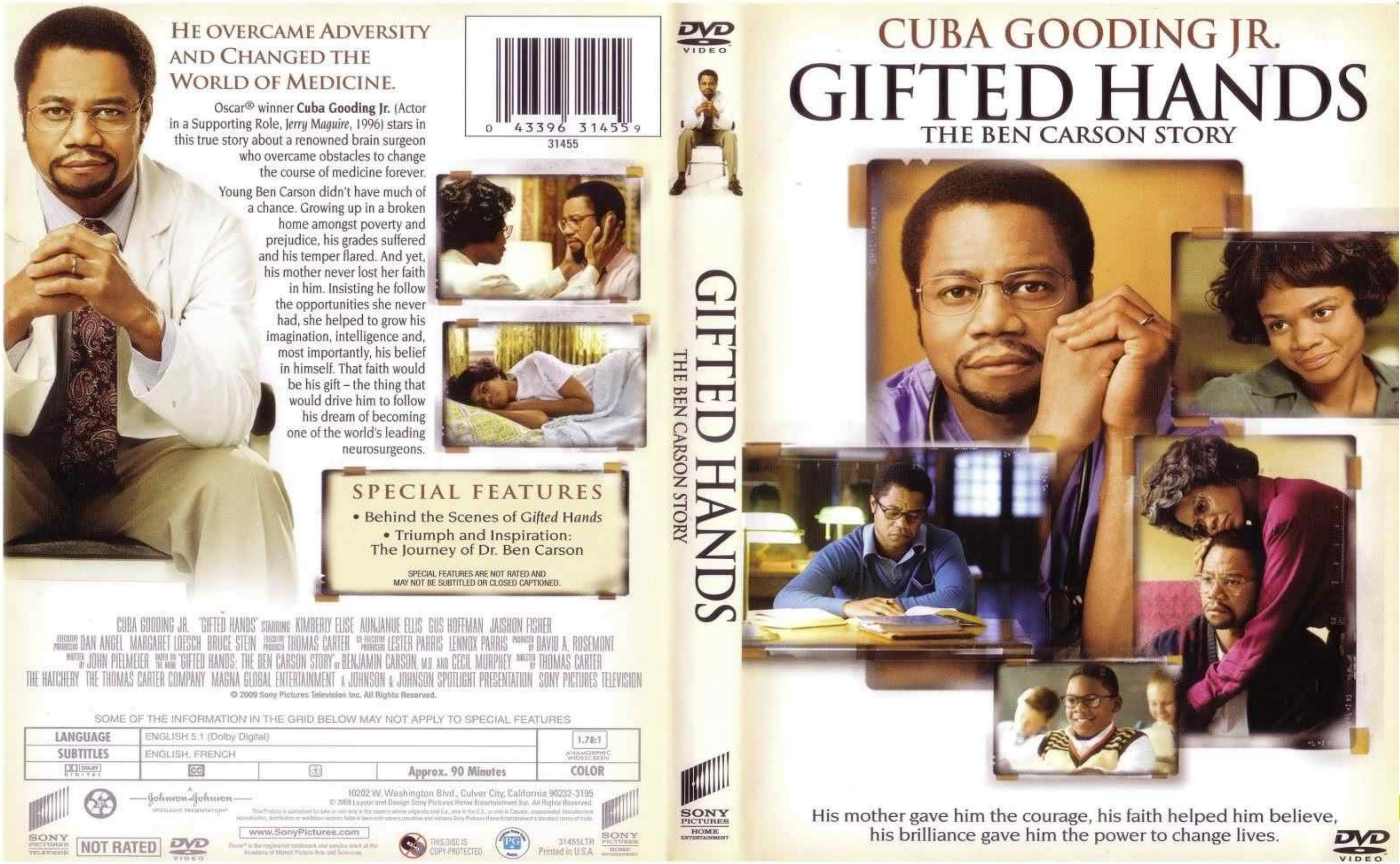
Movies to Watch



Movies to Watch



Movies to Watch



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